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On the Fair Value of Insurance Liabilities: The Continuing Debate

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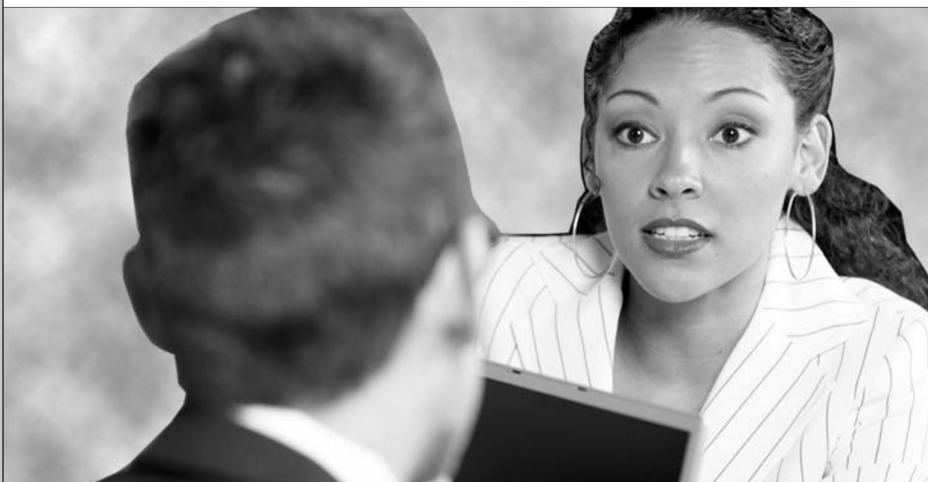

The September 2005 issue of *The Financial Reporter* contained an article by Luke Girard entitled "On the Fair Value of Insurance Liabilities: The Other Viewpoint." Mr. Girard's article was written in response to my article in the December 2004 issue.

Mr. Girard appears to agree with my argument that a policyholder, in purchasing a policy or contract from an insurance corporation, writes a credit put to the owner of the corporation. Where we appear to disagree is on the question of which balance sheet this put belongs on: the corporation's or the owner's. According to Mr. Girard, "The put arises because of the limited liability *of the corporation*, thus the company owns the put written by the policyholder. And because the company owns it, it inures to the benefit of the owner of the company. The owner's only interest is in the equity of the company and *limited liability means the value of that equity cannot be negative.*"

I believe Mr. Girard's statements are incorrect. First, a corporation does not have limited liability: its owners do. I quote from *investorwords.com*, which defines a corporation as "The most common form of business organization... This form of business is characterized by the *limited liability of its owners*...". In the same vein, the legal Web site *www.nolo.com*, in its definition of corporation, states: "One advantage of incorporating is that a corporation's *owners* (shareholders) are legally shielded from personal liability for the corporation's liabilities...".

Second, limited liability does not mean that shareholders' equity cannot be negative. Shareholders' equity is just another name for net assets or net worth, and is simply the arithmetical result of subtracting total liabilities from total assets. Consider a corporation, which has cash of $100 and an account payable, immediately due, of $110. Clearly, the amount of net assets of the corporation, or its shareholders' equity, is negative. Limited liability means that the owner or shareholder of a corporation cannot lose more than the amount invested. It does not mean that corporate liabilities cannot exceed corporate assets.

Mr. Girard takes the position that the credit put belongs on the corporation's balance sheet as a component of shareholders' equity. In order for this to be true, the credit put must be shown to be an asset of the corporation. I believe it can be demonstrated that the credit put is *not* an asset of the corporation.

An asset is an economic resource. It is property. Characteristics of the owner of any property include (1) the right to sell, transfer or otherwise assign the property to another party and (2) the ability to enjoy a benefit from an increase in value of the property, and to suffer harm from a decrease in value. We can consider the credit put in light of these characteristics. The owner of the credit put can transfer (or even relinquish) the credit put by, for example, writing a guaranty of the corporation's liabilities for the benefit of creditors, issuing a net worth maintenance agreement, or co-signing a stand-by letter of credit. In addition, creditors will place higher value on these guaranties as the corporation's credit quality decreases. This means the market price for such a guarantee will go up as credit quality goes down. However, this is just another way of saying that the value of the owner's credit put goes up as credit quality goes down. We see, then, that the characteristics of the credit put are such that only the owner of the corporation has the right to transfer the put, and only the owner of the corporation realizes increasing value of the put from a decrease in credit quality. Conversely, the corporation itself has no right to transfer the put. It cannot force the owners to guarantee the corporation's debts or otherwise to accept additional liability. It cannot force the owners to relinquish their rights to

limited liability. The corporation, in fact, enjoys none of the benefits of the put. Therefore, the put cannot properly be viewed as property of the corporation, but only as property of the shareholders. This means the put is not an asset of the corporation and, by definition, cannot be a component of its net worth.

Reasoning from basic economic principles, we can use the arguments presented here to conclude that the credit put is owned by the shareholders of an insurer and is not part of the insurer's own accounts. We can reach, I believe, the same conclusion by reasoning from the practical basics of financial statements. Specifically, the goal of a financial statement is to produce useful information for users of the financial statement. The users are interested in making certain economic decisions about the enterprise, which may include investing in the enterprise, reappointing (or replacing) its management and so on.

Let us consider, in this light, two identical insurance companies, termed Company A and Company B, both rated AAA currently. Suppose both companies have agreed by contract to make a payment to a policyholder of $1,000 in five years' time. Let us assume the five-year AAA spot rate is 5 percent. If we accept Mr. Girard's arguments, each company should value its liability at $1,000 x (1.05)^(-5), or approximately $784.

Let us further assume, immediately following the issuance of this contract, that Company B hires the Three Stooges as its management. *(Please do not write to me saying the Three Stooges are already managing your company)*. Anticipating future problems, the market reacts by adding three percentage points to Company B's credit spread.

If we accept the idea that liabilities of Company B should be valued using Company B's current credit spread, the new liability value becomes $1,000 x (1.08)^(-5), or $681. Since the assets of the company have remained unchanged, the effect of hiring the Stooges is to increase reported net worth by $103. On the other hand, Company A's net worth remains the same.

A user of financial statements could reach a number of conclusions: (1) Company B is worth more than Company A, even though both companies have made the same contractual promise, (2) the Stooges are excellent managers, having increased the net worth of the company very quickly, (3) Company B is a better investment opportunity and (4) Company B has more surplus to absorb deviations. I believe the absurdity of all these conclusions suggests that

Company B's financial statements are not useful to users of the statements, whether those users are current shareholders, potential investors, lenders, rating agencies or regulators. The financial statements could cause the user to make poor economic decisions.

By reasoning, then, either from economic principles or from the practical purpose of financial statements, I believe that it is incorrect to assert that the credit put is part of shareholders' equity.

I would like to turn to some other comments made by Mr. Girard in his article. First, Mr. Girard states that the use of a risk-free discount rate is inconsistent with past practice. This is true. My December 2004 article did not deal with the merit (or lack thereof) of deviating from past practices, so I will not address the point here, other than to indicate that, by definition, any change in accounting method is a deviation from past practice.

Second, Mr. Girard expresses concern that discounting at the risk-free rate "... could lead to life insurers reporting losses when writing profitable new business." My article addressed only the valuation of liabilities, but the following observations can be made. Suppose a company issues a contract with a $10 profit load, which is priced under the assumption that the insurer will earn a rate of 6 percent. Suppose the risk-free rate is 5 percent, and suppose further the contract requires a payment of $1,000 in five years' time. The insurer collects $10 plus $1,000 x (1.06)^(-5), or $757, and establishes a liability of $1,000 x (1.05)^(-5) = $784. It would appear, upon issue, that the insurer has suffered a loss of $784 - $757, or $27.

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Presumably the 6-percent rate is the rate expected to be earned on some sort of risky security. Let us assume the risk is a default risk. The actual rate of return on the security can only be known as time passes. That is, we do not know upon issuance of the contract if the risky security will default (and hence yield less than 6 percent) or not default (and hence yield 6 percent).

From an economic perspective, the issuer has suffered a loss at issue. This can be demonstrated by comparing the amount received for the policy to the economic cost of issuing the contract. The economic cost of the contract is the cost of completely defeasing the liability. This defeasement can be accomplished in two ways, either by selling the risky security and buying a risk-free security that precisely matches the liability, or by retaining the risky security and buying credit protection in the market. Under the first option, the insurer sells the risky security for $747 and buys risk-free instruments for $784, suffering a loss of $37 less the load of $10, or $27. In the second case, the cost of the credit protection is $37 (the present value of the credit spread), so the loss is again $27 after considering the $10 load.

In summary, I would like to commend Mr. Girard for adding his thoughts to the ongoing debate. Nevertheless, I remain convinced that the IASB's use of issuer credit spreads in valuing liabilities is both economically incorrect and produces less useful financial statements. $

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